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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,036	12/02/2003	Ake Holm	150-134	2607

7590

04/29/2005

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EXAMINER

HUG, ERIC J

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,036	Applicant(s) HOLM ET AL.	
	Examiner Eric Hug	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 13, 14 and 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitations "one wall" and "the two walls". There is insufficient antecedent basis for these limitations in the claim.

Claims 14 and 20-23 depend on claim 13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11, 12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwerdt (US 3,470,064) in view of Sinclair (US 1,814,864) or McDonnell (US 1,903,311).

Schwerdt discloses a spray receiving device for a dandy roll in a papermaking machine.

Figure 1 shows Fourdrinier wire 1, a dandy roll 3, a spray of water 32 projected from the rotating dandy roll, and a cylinder 4 that is axially parallel to the dandy roll. Cylinder 4 is mounted so

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that its face intersects the spray of water. Water that impinges on the cylinder face is entrained by the rotating cylinder to prevent the water from falling onto the formed web on the wire. A wiper 51 and trough 5 are mounted near the cylinder to remove water therefrom. The cylinder is supported on telescopic columns so that it can be moved vertically to a desired position above the wire. The cylinder can also be positioned at a desired angle by arms hingedly attached to the columns. This permits the cylinder position with respect to the spray path to be adjusted for variations in the spray path.

Regarding the claimed feature of a means for detaching and further conveying water from the dandy roll, Schwerdt does not disclose such a means. However, the use of a device to remove water from a dandy roll is well known in the art, as exemplified by the supporting references Sinclair and McDonnell. Sinclair teaches using wiper strips with applied vacuum and McDonnell teaches using a brush or doctor blade. Applicant has also disclosed as prior art the use of a doctor blade. Such additional devices would be obvious to facilitate the removal of water from the dandy roll. Since the invention of Schwerdt can be used to collect water thrown from any rotating roll tangentially engaging a web (column 3, lines 40-45), the use of cylinder 5 to collect sprayed water from a dandy roll does not preclude providing additional means of water removal along the dandy roll.

Regarding the feature of locating the rotating roll for capturing water under an imagined horizontal plane which goes through the center of the dandy roll, it is not clear from the drawing that this is the case in Schwerdt. However, it would be envisioned by one skilled in the art that the roll configuration of Schwerdt provides for at least this claimed feature, particularly since the position of the cylinder 5 is adjustable depending on the operating conditions and the path of the

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spray. Such a location would result from routine optimization depending on the spray path and also on the sizes of the dandy roll 3 and cylinder 5.

Regarding claim 12, the dandy roll and cylinder are spaced apart and run parallel to one another along the width of the Fourdrinier wire.

Regarding claims 15 and 16, Schwerdt discloses typical paper machine speeds of up to 900 m/min, and Schwerdt also discloses that the rotational speed of the cylinder 5 is preferably not smaller than the machine speed (column 3, lines 32-35). Therefore depending on the machine speed, the periferical speed of the cylinder may fall within the claimed speed range. Such a speed may also be obtained through optimization.

Regarding claims 17 and 18, although the structural features of cylinder 5 are not disclosed, it would be obvious to one skilled in the art that cylinder 5 must be made of a material suitable for capturing water, and that it must have a smooth surface for all the water to be subsequently removed by wiper 5.

Regarding claim 19, sliding bars for vertical and horizontal movement are described above.

Allowable Subject Matter

Claims 13, 14, and 20-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The claims would be allowable for providing a doctor blade positioned above the center line of the dandy roll and a cover for detaching water from the dandy roll that is subsequently captured by the rotating roll.

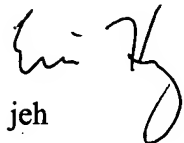
Note that regarding claim 13, the doctor blades in each of the supporting references are positioned above the center line of the dandy roll, and regarding claim 14, a second doctor blade (wiper 51) and tub (trough 5) are disclosed by Schwerdt.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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